

Serial No. 10/649,663

ASA-1150

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listing of claims in the application.

LISTING OF CLAIMS:

1. (Currently Amended) A switch being connected with a storage unit and a computer, said switch being connected with said storage unit through a plurality of communication lines, comprising:

a plurality of interfaces being connected with said storage unit or said computer; and
an internal switch for connecting said plurality of interfaces with one another;

wherein each of said plurality of interfaces comprising a management table connected to said internal switch; and

wherein a first interface of said plurality of interfaces receives a command from said computer, records in said storage unit an identifier for identifying said command, transfers said command to said storage unit through a first communication line of said plurality of communication lines, if a trouble is detected detects, in response to said command transferred to said storage unit, a trouble occurring in said first communication line, records a presence or an absence of a data transfer upon said command with said recorded identifier, transmits, if a presence of a data transfer has been recorded, a frame for noticing an error of said received command to said computer, otherwise determines not to transmit said frame for noticing said error of said received command to said computer, after said frame for noticing an error is transmitted to said computer, and thereafter transfers a command to be received from said computer to said storage unit through a different second communication line from said first communication line of said plurality of communication lines.

2. (Original) A switch as claimed in claim 1, wherein said first interface determines a trouble occurs in said first communication line if no response to said command having been transmitted to said storage unit is received a certain length of time later.

3. (Original) A switch as claimed in claim 1, wherein said first interface detects a

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trouble occurring in said first communication line by determining a cut-out of a physical connection with said storage unit.

4-6 (Canceled)

7. (Original) A switch as claimed in claim 1, wherein said first interface provides said computer with a virtual storage and, if a command from said computer to said virtual storage is received, translates said command to said virtual storage into a command to said storage unit.

8. (Currently Amended) A method of transferring a frame in a switch being connected with a storage unit and a computer through a plurality of communication lines, comprising the steps of:

receiving a command from said computer, and recording an identifier for indicating said received command, then transferring said command to said storage unit through a first communication line of said plurality of communication lines;

detecting, in response to said step of transferring said command, a trouble occurring in said first communication line;

recording a presence or an absence of a data transfer upon said command with said recorded identifier;

transmitting, if a presence of a data transfer has been recorded, a frame for noticing an error of said received command to said computer, otherwise determining not to transmit said frame for noticing said error of said received command to said computer; and

after said transmitting or determining step ~~frame is transmitted to said computer~~, transferring into said storage unit a command to be received from said computer through a ~~different second communication line~~ of said plurality of communication lines ~~from said first communication line~~.

9-10 (Canceled)